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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/642,647

08/19/2003

Yasuyuki Miura

1640.1019

3742

21171 7590 07/27/2007
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

WANG, CLAIRE X

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/642,647	Applicant(s) MIURA ET AL.	
	Examiner Claire Wang	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/4/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicants' response to the last Office Action, filed on May 4th, 2007 has been entered and made of record.
2. The rejection of claims 4 and 5 are rendered moot by applicant's cancellation of those claims.
3. In view of the Applicant's amendments, the rejection under 35 U.S.C. 112 second paragraph for claims 1-9 are expressly withdrawn.
4. In view of the Applicant's amendments, the rejection under 35 U.S.C. 101 for claim 9 is expressly withdrawn.

Response to Arguments

5. Applicant's arguments filed 4/5/2007 have been fully considered but they are not persuasive.

a. In response to applicant's argument that Tan et al. fails to teach "the editing module requests the distribution modules to distribute the image or voice to the receiving modules." It is noted that the video buffering verifier (VBV) is a checking algorithm that checks the bitstream with its delivery rate function to verify that the amount of rate buffer memory required in the decoded is less than the stated buffer size and the coded video bitstream shall be constrained to comply with the requirements of the VBV (Col. 11, lines 29-33 and lines 41-43).

b. In response to applicant's argument that Tan et al. fails to teach "causing each distribution module to change, in accordance with the performance level, a kind and use frequency of a video object plane (VOP) to be used, to thereby select a coding algorithm which enables highly efficient compression." It is noted that VBV is an algorithm for checking a bit stream with its delivery rate function to make sure that the delivery rate does not overwhelm the receiving system (Col. 11, lines 29-43) thus allowing for high efficiency.

c. In response to applicant's argument that Tan et al. fails to teach "selecting a coding algorithm in accordance with the performance level." It is noted that the performance of Tan's teaches is shown using bit rate field, which shows the bits per second (Col. 11, lines 64-67). The bit rate field is used within the VBV to control bit rate flow, thus it must use some form of algorithm for said function.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tan et al. (US 6,542,549 B1) (from this point forward will be referred to as Tan) in view of Kato (US 6,744,927 B1).

As to claim 1, Tan teaches a real-time contents editing method for editing a large number of images, including live images, and/or voices which are present in a dispersed fashion on the Internet, and distributing the edited images and/or voices to a plurality of users (method for regulating the computational and memory requirements of a compressed bit stream in a video, which may be used in the field of multimedia audio-visual coding and compression; Col. 1, lines 9-17), the method comprising: a plurality of distribution modules each adapted to code an input image (VOP coding types consists of I, P and B-VOPs or I and P-VOPs; Col. 6, lines 40-45), by use of a coding standard which enables coding while selecting one of a plurality of coding algorithms and to distribute the coded input image, a plurality of receiving modules each adapted to receive and display the image or voice distributed from the distribution modules (the VOPs are first decoded then displayed; Col. 6, lines 42-42), and at least one editing

module (The video buffering verifier (VBV); Col. 11, line 29) that requests the distribution modules to distribute the image or voice to the receiving modules (VBV is a decoder buffer that decodes the VOP, the VBV buffer is initially empty then the data of the VOP is sent to the buffer to be decoded; Col. 12, lines 12-15); determining the performance level of a machine (bit rate field shows the bits per second; Col. 11, lines 64-67) to be used through measurement, in the system, of a time required for coding of a video object plane (VOP) (τ_i is the composition time of VOP; Col. 12, line 29); and causing each distribution module to change, in accordance with the performance level, a kind and use frequency of a video object plane (VOP) to be used, to thereby select a coding algorithm which enables highly efficient compression (VBV is an algorithm for checking a bit stream with its delivery rate function to make sure that the delivery rate does not overwhelm the receiving system; Col. 11, lines 29-43).

Tan teaches of input data being pictures (Col. 2, line 30), however Tan does not teach the input pictures are provided by a plurality of video cameras. Kato teaches of a data communication system using multiple input cameras and processors to allow transmission of images through network communication (Fig. 2). Thus Kato's data communication system reads on the claimed camera input data. Therefore, it is obvious to one ordinarily skilled in the art at the time of the invention to combine the bit-stream compression system of Tan with the camera since it is well known in the art to use cameras to obtain images.

As to claim 2, Tan teaches wherein processes for coding the input image are divided into basic processes (case 1: I and P-VOPs only; Col. 6, lines 50-67 and Col. 7, lines 1-9) and auxiliary processes (case 2: I, P and B-VOPs; Col. 7, lines 11-20); a coding execution time of each of the basic and auxiliary processes is measured (Fig. 5 shows presentation time stamps of each process); and the kind and use frequency of a video object plane (VOP) to be used is changed on the basis of results of the measurement (Fig. 5 shows different VOPs used).

As to claim 3, it is the same as claim 1. The only difference between the two claims is that claim 1 is a method whereas claim 3 is a system. Therefore, claim 3 is analyzed in the same way as claim 1. Please see above for details.

As to claim 6, Tan teaches wherein the coding standard is the MPEG-4 standard (VOP is only used by MPEG-4 compression, Tan's invention talks about decoding VOP therefore it is using MPEG-4 coding standard; Col. 4, lines 19-24).

As to claim 7, Kato teaches wherein the editing module is adapted to request a distribution server to multicast the images or voices (Fig. 11 shows the connection between multiple clients with the server to transmitting images and voices), and is adapted to generate and multicast a scene description language to be transmitted to a plurality of clients (Fig. 3 shows an example of how the images can be displayed on a screen, multiple images may be displayed at the same time on a screen).

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As to claim 8, Tan teaches wherein the coding process according to the selected coding algorithm is carried out in a step-by-step manner such that required minimum coding is completed after lapse of a predetermined time (B-VOPs are the basic frames that are always composed; Col. 12, lines 45-47), whereupon an auxiliary coding process of enhanced resolution and compression rate is carried out (the composition of I or P VOP is delayed until all B-VOPs are composed; Col. 12, lines 45-47); and if a relevant auxiliary coding process is not completed when a limited period of time has elapsed, the auxiliary coding process is interrupted, and the result of the coding process in an immediately preceding step is distributed (Col. 12, lines 58-64 shows the determination of the decoding time and the presentation order verses the decoding order; notice that in the presentation order some of the P frames are cut out of the original decoding order because the lack of time).

As to claim 9, it is the same as claim 1. The only difference between the two claims is that claim 1 is a method whereas claim 9 is a computer program. Therefore, claim 9 is analyzed in the same way as claim 1. Please see above for details.

As to claim 10, it is the apparatus claim of claim 1. Please see claim 1 for detail analysis.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

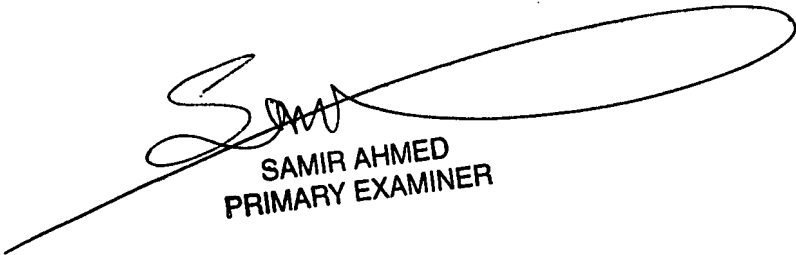
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Claire Wang whose telephone number is 571-270-1051. The examiner can normally be reached on Mid-day flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on 571-272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Claire Wang
07/21/2007



SAMIR AHMED
PRIMARY EXAMINER